

# Choroidal Metastasis of Small Cell Lung Cancer

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Choroidal metastasis is the most common intra-ocular malignancy. Breast and lung cancers represent more than two thirds of the primary cancer sites.<sup>1</sup> Choroidal metastasis in lung cancer is usually present when multiple other organs are affected. Although it is not uncommon, with an incidence rate of 0.7% to 12%,<sup>2</sup> there are few published reports because routine screening is not recommended considering the short survival and little benefit.<sup>3</sup>

## CASE REPORT

A 60-year-old man was diagnosed as having small cell lung cancer with multiple bone and pleural metastasis in September 2004. Although he received two cycles of chemotherapy with etoposide (100 mg/m<sup>2</sup>, day 1–3, every 3 weeks) and carboplatin (area under the curve 6, day 1, every 3 weeks), the lung mass and disseminated pleural lesions were

aggravated. The patient reported blurred vision and pain in his right eye. The orbit ultrasonography and fundusoscopic examination showed a dome-shaped mass in the right choroid. This solid enhancing mass was also found in brain magnetic resonance imaging. However, there was no metastatic brain lesion. Combination chemotherapy with topotecan (0.75 mg/m<sup>2</sup>, day 1–5, every 3 weeks) and cisplatin (60 mg/m<sup>2</sup>, day 1, every 3 weeks) and radiotherapy of 4000 cGy to the right orbit were administered. Lung and pleural lesions were partially resolved, and the choroidal mass almost completely disappeared on fundusoscopic examination. There were no further eye symptoms, and the patient died 6 months later because of disease progression.

Treatment of choroidal metastasis depends on the size and extent of tumor, the visual status of the affected or non-affected eye, the stage of lung cancer, and the performance of the patient. Radiotherapy may be a reasonable therapeutic option to improve the quality of remaining life (Figures 1 and 2).<sup>4</sup>

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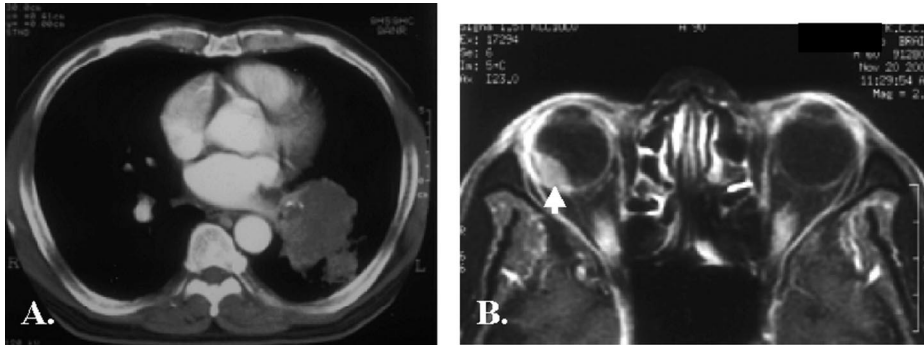
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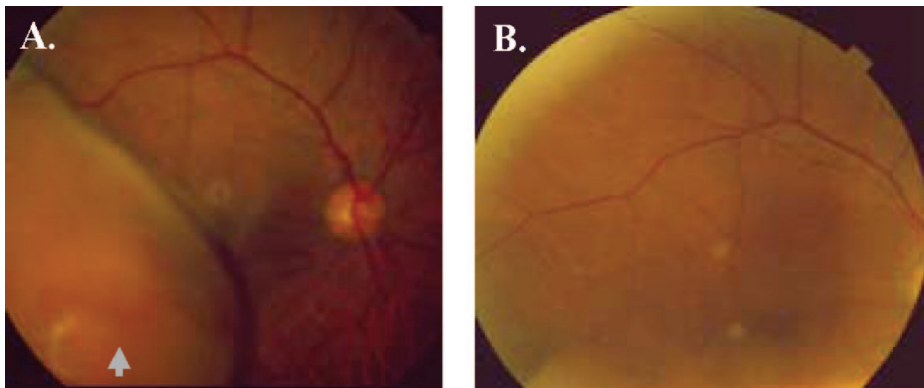
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**FIGURE 1.** (A) A large mass on the left lower lobe was found on chest computed tomography. This mass was proven as a small cell lung cancer by bronchoscopic biopsy. (B) Brain magnetic resonance imaging showing a solid enhancing mass on the right eyeball.



**FIGURE 2.** (A) A dome-shaped mass in choroids on funduscopy. (B) A choroidal mass disappeared after chemotherapy with topotecan and cisplatin and radiotherapy of 4000 cGy.